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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/748,008  
Filing Date: December 30, 2003  
Appellant(s): VAN BRABANT, LUC

Richard C. Auchterlonie  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 12/21/2009 appealing from the Office action mailed 7/21/2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The Examiner has withdrawn the rejections for Claims 7, 11-15, 27-28, 30, 33. However the Examiner maintains the rejection for Claims 6, and 22-26

**WITHDRAWN REJECTIONS**

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

The rejections of Claims 11-15, 27-28, 30 under U.S.C 102 have been withdrawn.

The rejections of Claims 7 under U.S.C. 103 have been withdrawn

The rejections of Claims 30, 33 under U.S.C. 112 second paragraph have been withdrawn due to amendment.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claim 6 is rejected under 35 U.S.C. 102(e) as being anticipated by Smithson.

Regarding Claim 6

Smithson (6802012) teaches a method of operating a plurality of virus checkers for on-demand anti-virus scanning concurrent with on-access anti-virus scanning, the method comprising:

Combining on-demand anti-virus scan requests and on-access anti-virus scan requests in a virus scan request queue (*Fig. 2 is a flow diagram illustrating the allocation of a priority level by the anti-virus system. At step 10 a file access request is received from the operating system file service. At step 12 a check is made to whether the file access request is the result of an on-demand scan or is a result of normal operation of the computer system, Column 4, in particular lines 50-55*)) ;

Distributing the on-demand anti-virus scan requests and the on-access virus scan requests from the virus scan request queue to the virus checkers  
*("The scan controller also operates to select the next pending scan request to be processed from the pending scan list and pass this information to the scan engine. The scan controller*

*selects the oldest high priority scan stored within the pending scan list" Column 5, in particular lines 46-50)*

Wherein the on-access anti-virus scan requests are produced in response to user access to files (See Figure 2, also *"In the case of a normal file access request, the computer user associated with the scan request may be the file access request" Abstract*)

Wherein the on-demand anti-virus scan requests are produced in response to a system administrator requesting a scan of files within a specified file system (*The originator or the on-demand task will typically be the system administrator, Column 3, in particular lines 37-41*)

Smithson teaches the method of claim 1 which includes grouping the on-demand anti-virus scan requests into chunks, each of the chunks including multiple ones of the on-demand anti-virus scan requests and placing the chunks onto the virus scan request queue. (*Figure 2 of Smithson teaches placing on-demand scan requests into a queue, Figure 3 shows the "chunks"*)

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Claims are rejected under 35 U.S.C. 102(a) as being anticipated by McAfee ("Groupshield and the Microsoft Virus Scanning API" May 1, 2002).

Regarding Claim 22-25,

McAfee teaches a method of operating a plurality of virus checkers for on-demand anti-virus scanning concurrent with on-access anti-virus scanning, the method comprising:

Combining on-demand anti-virus scan requests and on-access anti-virus scan requests in a virus scan request queue;

Distributing the on-demand anti-virus scan requests and the on-access virus scan requests from the virus scan request queue to the virus checkers

*("In virus scanning API 2.0,.. items are submitted to a common information store queue as they are submitted to the information store. Each of these items receives a low priority in the queue, so that these items do not interfere with the scanning of the high-priority items...The priority of the items is dynamically upgraded to high priority if a client attempts to access the item while the item is in the low-priority queue" pg. 4).* The Examiner interprets "client attempts to access the item" as an on-access scan request, and the new unchecked files migrated into the file server ("items submitted to the information store") as "on-demand" scan requests. Page 3 shows on-access scan requests being placed within "chunks" of on-demand scan requests.

A pool of threads distributing the on-demand anti-virus scan requests and the on-access scan requests from the request queue to the virus checkers, each anti-virus scan request on the virus scan request queue being serviced by a respective one of the threads in the pool of threads *("This queue is now serviced by a series of threads (the default number of threads is : 2\* number of processors + one), with high-priority items always taking precedence." pg. 3)* ("Each messaging Database receives one thread to conduct the background scanning process" pg. 4)

McAfee teaches the method of claim 12, which includes inhibiting the placement of at least one of the chunks onto the virus scan request queue until completion of anti-virus scanning for the anti-virus scan requests in a prior one of the chunks *("if a user accesses an item, it attains a high priority and jumps to the front of the queue" pg. 3 of*

McAfee)(*"The priority of the items is dynamically upgraded to high priority if a client attempts to access the item while the item is in the low-priority queue. A maximum of 30 items can exist at one time in the low-priority queue, which is determined on a first in, first out basis"* pg 4 of McAfee) *The Examiner interprets the maximum of 30 as inhibiting the placement of a chunk until a prior one is completed.*

McAfee also teaches wherein said processor is programmed for grouping the on-demand anti-virus scan requests into chunks, each of the chunks including multiple ones of the on-demand anti-virus scan requests into chunks. *(See page 3 of McAfee, shows "chunks" of on-demand requests in the global scanning queue)*

Regarding Claim 26

McAfee teaches the system of claim 24, wherein the on-demand anti-virus scan requests are produced in response to a system administrator requesting a scan of files within a specified file system *(See pg. 4, API 2.0 Proactive scanning, API 2.0 Background scanning, also Groupshield is intended for system administrators)*



Claim 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smithson in view of McAfee.

#### Regarding Claims 24

Smithson teaches the method of claim 1, but does not explicitly teach wherein the on-access anti-virus scan requests are given priority over the on-demand anti-virus scan requests by inhibiting the placement of on-demand anti-virus scan requests onto the virus scan request queue when the number of anti-virus scan requests reaches a threshold, and not inhibiting the placement of on-access anti-virus scan requests on the virus scan request queue when the number of requests reaches the threshold

McAfee teaches wherein the on-access anti-virus scan requests are given priority over the on-demand anti-virus scan requests by inhibiting the placement of on-demand anti-virus scan requests onto the virus scan request queue when the number of anti-virus scan requests reaches a threshold, and not inhibiting the placement of on-access anti-virus scan requests on the virus scan request queue when the number of requests reaches the threshold (*"if a user accesses an item, it attains a high priority and jumps to the front of the queue"* pg. 3 of McAfee)(*"The priority of the items is dynamically upgraded to high priority if a client attempts to access the item while the item is in the low-priority queue. A maximum of 30 items can exist at one time in the low-priority queue, which is determined on a first in, first out basis"* pg 4 of McAfee) McAfee teaches a first in, first out basis, which

anticipates “inhibiting the placement of at least on of the chunks onto the virus scan request queue until completion of anti-virus scan requests in a prior one of the chunks.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Smithson to limit on-demand scan requests and not inhibit on-access requests.

The motivation to not limit on-access requests is because they are high-priority and the on-demand requests are limited because they are lower-priority.

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***Allowable Subject Matter***

Claims 11-15, 29, 30-32, 34 are allowed.

Claims 27-28 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims

**(10) Response to Argument**

**2. Claim 6 is anticipated by Smithson**

Appellant has argued “appellant’s Claim 6 recites a “grouping” operation distinct from the “placing” operation (pg. 15).”

Appellant further argues "Figure 2 of Smithson shows that one on-demand or on-access scan request is received in step 10 and then written to the virus scan request queue. Thus individual scan requests and not chunks of plural scan requests are placed on the virus scan request...Moreover, the "Time Requested" stamps in figure 3 are an indication that the plurality of requests shown in the virus scan were placed onto the virus scan requests individually at different respective times (pg. 16)."

The Examiner respectfully disagrees. The claim language recites "grouping the on-demand anti-virus scan requests into chunks, each of the chunks including multiple ones of the on-demand anti-virus scan requests and placing the chunks onto the virus scan request queue."

Smithson teaches receiving individual scan requests from different sources. Based upon the priority of the requestor/creator the requests are grouped. Figure 3 clearly shows two pending scans by the "User" given the same priority. The "Time Requested" further proves that there is a definite grouping as the Administrator with higher "Priority" but a later "Time Requested" gets a higher processing order than scan requests from the "User."

The placement of these requests is then based on the priority of the grouped "Chunk." For instance, multiple requests from the Administrator would be grouped and then placed ahead multiple requests from Users.

As such, Smithson teaches both the "grouping" operation as well as the "placing" operation.

**3. Claim 22-28 are anticipated by McAfee**

**Claim 22**

Appellant argues "appellant does not see 'grouping,' the on-demand anti-virus scan requests into chunks, each of the chunks including multiple ones of the on-demand anti-virus scan requests and placing the chunks onto the virus scan request queue (pg. 22)"

McAfee shows scan requests being grouped based on priority, with higher priority items being placed in the front of the queue and lower priority items being placed to the end of the queue. Therefore multiple scan requests with higher priority are first grouped by priority and then placed in the front of the queue. McAfee describes "when all of the high priority items have been scanned, virus scanning API begins to scan low-priority items (pg. 4)." Therefore McAfee teaches grouping (by priority) and then placing to the front or back of the queue.

**Claims 24, 25 and 26**

Appellant argues that chunks are placed "consecutively" onto the scan request queue. Similarly, McAfee teaches multiple priorities that are consecutively placed on the scan request queue.

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Harris C Wang/

Examiner, Art Unit 2439

Conferees:

/Christopher J Brown/

Primary Examiner, Art Unit 2439

/Kambiz Zand/

Supervisory Patent Examiner, Art Unit 2434